

Appl. No. 10/611,405
Amendment dated January 13, 2005
Reply to Office Action of October 13, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 - 16 (canceled)

Claim 17 (currently amended): ~~A plug for use in the injection of a fluid into a plant, the plug comprising a body having a membrane disposed therein through which a needle is passed to inject the fluid into the plant, the membrane including a curved cross section adjacent to the pressurized reservoir, the plug being positionable in a bore of the plant to help provide a pressurized reservoir in the plant.~~

A plug for use in the injection of a fluid into a woody plant of the type having a xylem and outer bark, such plant having at least one bore hole having dimensions and sides drilled through its outer bark and into its xylem, said plug comprising:

a body having a body wall and an aperture defined therethrough, said body formed generally in the dimensions of said bore hole in said xylem, said body having first and second ends; and

a membrane having a curved portion and sides disposed in said aperture near said second end of said body of said plug, said curved portion of said membrane directed toward said xylem, said membrane having sides engaged to said body wall and disposed, when a needle carrying fluid is passed therethrough to inject the fluid into said plant to form a reservoir of pressurized fluid in the xylem of said plant, said membrane forming a seal when said needle is withdrawn wherein such pressure pushes on said curved portion of said membrane, causing by

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said pushing on said curved portion of said membrane the forcing of said membrane's sides outward against said body wall.

Claim 18 (currently amended): ~~The plug according to Claim 17, wherein the body is shaped to be permanently inserted into the bore of the plant.~~

The plug according to Claim 17 further including:

a first circumferentially curved ridge formed around said first end of said body forming a first barb for aiding in securing said plug in said bore hole formed in said xylem of said plant; and

a second circumferentially curved ridge formed around said second end of said body, forming a second barb near said second end for urging against said sides of said bore hole in said xylem for aiding in sealing said pressurized fluid in said plant.

Claim 19 (currently amended): ~~The plug according to Claim 17 further comprising a barb for securing the plug in the bore of the plant and a barb for sealing the fluid in the bore of the plant.~~

The plug according to Claim 18 further including at least one slot defined in said body wall near said second end thereof to aid in allowing passage of said pressurized fluid into said xylem of said plant.

Claims 20 - 42 (canceled)

Claim 43 (new): The plug according to Claim 19 wherein said plug is to be permanently inserted into said bore hole formed in said xylem of said plant below said bark to allow said bark to grow thereover.